## EXHIBIT 7

## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

-----x

RONALD CANTOR, IVAN SNYDER and JAMES A. SCARPONE, as TRUSTEES OF THE MAFCO LITIGATION TRUST,

Plaintiffs,

- against -

: Civil Action No. 97-586 (KAJ)

RONALD O. PERELMAN,
MAFCO HOLDINGS INC,
MacANDREWS & FORBES HOLDINGS INC,
ANDREWS GROUP INCORPORATED,
WILLIAM C. BEVINS and
DONALD G. DRAPKIN,

Defendants.

## EXPERT REBUTTAL REPORT OF ROBERT W. HOLTHAUSEN

## I. Qualifications

1. My name is Robert W. Holthausen and I am the Nomura Securities Co. Professor of Accounting and Finance at the Wharton School of the University of Pennsylvania. I received the B.A. degree from St. Lawrence University in 1969, the M.B.A. and Ph.D. degrees from the University of Rochester Graduate School of Management in 1971 and 1980, respectively. From 1979 to 1983, I was an Assistant Professor of Accounting and Finance at the Graduate School of Business of the University of Chicago. From 1983 to 1989 I was an Associate Professor of Accounting and Finance at the Graduate School of Business of the University of Chicago. From 1989 to the present I have been a Professor of Accounting and Finance at the Wharton School of the University of Pennsylvania. In

1992 I was appointed to the Nomura chair which I still hold. I have served on the editorial boards of a number of professional journals as described on my curriculum vitae, which is attached as Exhibit 1. I am currently an Editor of the Journal of Accounting and Economics. I have published a number of articles on accounting and finance. These are also listed on Exhibit 1.

## II. Retention

2. I have been asked by counsel for the Defendants to review the Report of Jeffrey L. Baliban, dated January 13, 2006, who was asked to conduct an analysis of whether. and to what extent, Marvel Entertainment Group, Inc. ("Marvel") was harmed by the issuance of the Marvel (Parent) Holdings Inc. Notes and the Marvel III Holdings Inc. Notes (collectively referred to as the "Holding Company Notes"). Among other things. Mr. Baliban concludes in paragraph 23 of his report that by applying the research of Professors Andrade and Kaplan, "between \$308.5 million and \$617.0 million, was lost due to financial distress caused by the Indenture Covenants and the financing decisions made in light of those covenants." In addition, in paragraphs 34 to 39, Mr. Baliban uses the price reaction of Marvel's stock on November 12, 1996 to the announcement of a refinancing proposal from Andrews Group Incorporated ("Andrews Group") to infer that the Indenture Covenants contained in the Holding Company Notes ("Indenture Covenants") "caused harm to Marvel in the amount of at least the approximately \$190 million reduction in Marvel's equity value." Counsel for the defendants has asked me to address these assertions. I have also been asked to calculate the Prudent Investor Rate for several time periods in accordance with the opinion in Chang's Holdings S.A. v.

<sup>&</sup>lt;sup>1</sup> Report of Jeffrey L. Baliban, dated January 13, 2006, paragraph 39.

Page 4 of 46

Universal Chemicals and Coatings, Inc. from the Court of Chancery of Delaware, New Castle County, dated November 22, 1994.

- 3. Preliminarily, I note that I am not acknowledging that Marvel was itself bound by the Indenture Covenants referenced herein. I understand that issue to be a legal point. Rather, I have been asked for purposes of this analysis to accept, solely on a hypothetical, "what-if" basis, plaintiffs' contention that Marvel was so bound, even though I understand defendants to be asserting otherwise.
- 4. Exhibit 2 contains a list of cases in which I have provided testimony during the last four years. My compensation in this matter is \$800 per hour.
- 5. In conjunction with the matters addressed in this report, I have considered the materials listed on Exhibit 3. I reserve the right to consider any additional materials l may deem appropriate in conjunction with any supplemental or rebuttal reports or otherwise. I also reserve the right to consider and/or rely upon other expert reports that may be filed in this matter and any further testimony of any fact or expert witnesses at a deposition or at trial.

## III. Application of the Andrade and Kaplan Study to Marvel

6. Mr. Baliban in paragraph 23 estimates the financial distress costs "caused by the Indenture Covenants and the financing decisions made in light of those covenants and other terms of the Notes" to be between \$308.5 million and \$617.0 million, based on Marvel's enterprise value of \$3,085.0 million on January 31, 1994 (prior to the issuance of the Marvel III Notes in February 1994) multiplied by the 10 percent to 20 percent

estimate of the costs of financial distress discussed in Andrade and Kaplan.<sup>2</sup> This is an incorrect application of the Andrade and Kaplan study to this matter. Further, there are alternative estimates of the costs of financial distress available from that study, which Mr. Baliban ignores. If the Andrade and Kaplan study is to be applied, one has to consider all of the evidence in that study; it is not appropriate to apply the study selectively.

- 7. The conceptually correct measure to estimate is the incremental expected costs of financial distress associated with the Indenture Covenants at the time that the notes were issued. This measure would provide a basis on which to assess the cost to Marvel, if any, associated with the issuance of the Holding Company Notes. As I describe below, Mr. Baliban's measure is incorrect for several reasons.
- 8. First, Mr. Baliban's measure is incorrect because he assumes that it was certain that Marvel would experience financial distress. I will term this error of Mr. Baliban's the "financial distress certainty assumption". Even in Andrade and Kaplan's sample of 136 highly leveraged transactions ("HLTs"), fewer than 30 percent of the firms experienced financial distress as defined in the Andrade and Kaplan study. Furthermore, Marvel was not a highly leveraged company at the time that the Holding Company Notes were issued, which further reduces the probability of financial distress. Thus, it is inappropriate to assume that it was certain that Marvel would experience financial distress.
- 9. Second, Mr. Baliban's measure is incorrect because it assumes that Marvel's financial distress was caused solely by the Indenture Covenants. Any company with debt has some probability of experiencing financial distress, including Marvel absent the

<sup>&</sup>lt;sup>2</sup> Gregor Andrade and Steven N. Kaplan, "How Costly is Financial (Not Economic) Distress? Evidence from Highly Leveraged Transactions that Became Distressed," Journal of Finance, Vol. LIII, No. 5 (October, 1998), p. 1445.

existence of the Holding Company Notes. I will term this error of Mr. Baliban's the "sole causation assumption". Since Mr. Baliban does not attempt to apportion the economic harm between the effect of the Holding Company Notes and the effect of Marvel's capital structure decisions absent the Holding Company Notes, his measure is flawed.

10. Third, even if Mr. Baliban wants to measure the economic harm using the "financial distress certainty assumption" and the "sole causation assumption", he does not apply the 10 percent to 20 percent estimate from the Andrade and Kaplan study correctly in paragraph 23 and Exhibit 5. Andrade and Kaplan's 10 percent to 20 percent estimate of financial distress costs is measured for their sample companies one year prior to the onset of financial distress.<sup>3</sup> In their study, they define the onset of financial distress as the earliest of (1) defaulting on a debt payment, (2) an indication that the HLT has attempted to restructure its debt because of difficulty in making debt payments or (3) any fiscal year where a company's EBITDA falls below its interest expense.<sup>4</sup> Although Marvel did not default on a debt payment or have EBITDA fall below interest expense for a fiscal year prior to filing for bankruptcy, it did announce an attempt to restructure its debt on October 8, 1996, which is the appropriate date of distress consistent with

Andrade and Kaplan state, "Our interpretation of the operating results is that the net costs of financial distress are 10 percent to 17 percent, corresponding to the percentage decline in operating and net cash flow margins from the year before distress to the year after resolution. Adding direct costs of 3 percent on the high end, generates a range of 10 percent to 20 percent." See Gregor Andrade and Steven N. Kaplan, "How Costly is Financial (Not Economic) Distress? Evidence from Highly Leveraged Transactions that Became Distressed," Journal of Finance, Vol. LIII, No. 5 (October, 1998), p. 1463.

<sup>&</sup>lt;sup>4</sup> Gregor Andrade and Steven N. Kaplan, "How Costly is Financial (Not Economic) Distress? Evidence from Highly Leveraged Transactions that Became Distressed," Journal of Finance, Vol. LIII, No. 5 (October, 1998), p. 1450.

Andrade and Kaplan.<sup>5</sup> Under the methodology of the study, Mr. Baliban should have applied Andrade and Kaplan's 10 percent to 20 percent cost of financial distress estimate to the value of Marvel's debt and equity as of December 31, 1995 of \$1,908.6 million and not, as Mr. Baliban does, to the value of Marvel's debt and equity as of January 31, 1994 of \$3,085.0 million. This timing error results in an overstatement of the economic harm between \$117.6 million and \$235.3 million, even when utilizing the flawed assumptions of "financial distress certainty" and "sole causation".

11. Fourth, in his paragraph 23 and Exhibit 5, Mr. Baliban calculates the economic harm that Marvel supposedly suffered because of the Indenture Covenants by applying Andrade and Kaplan's 10 percent to 20 percent estimate of the cost of financial distress to the value of Marvel prior to the issuance of the Marvel III Notes. In so doing, Mr. Baliban argues in paragraph 22 that

"The use of bank debt to finance acquisitions between 1993 and 1995 benefited Mr. Perelman because it allowed him to maintain (through his holding companies) his 80 percent equity stake in Marvel and not suffer the consequences of a tax deconsolidation event, or spend additional capital to buy Marvel stock. The extensive use of bank debt also enabled the Marvel Holding Companies to comply with Indenture Covenants that required them to cause Marvel to continue to have a majority of outstanding stock owned by the Marvel Holding Companies. The bank debt clearly resulted in Marvel's having debt-to-equity ratios significantly above those of comparable companies and was a cause of Marvel's financial distress. In the absence of the Indenture Covenants, which made the Marvel III Note issuance possible, it would have been in Marvel's interest to issue equity such that its capital structure would have been much more in line with comparable companies. Thus, it is my opinion that the Indenture Covenants was a cause of Marvel's Financial Distress."

12. In essence, Mr. Baliban argues that the highly leveraged position of Marvel was caused by the Indenture Covenants. If I adopt this assumption, for illustrative purposes only, then the Andrade and Kaplan study provides another potential measure of the

<sup>&</sup>lt;sup>5</sup> "Marvel 1996 Third Quarter Preliminary Results," PR Newswire, October 8, 1996.

expected cost to Marvel associated with the Indenture Covenants, which Mr. Baliban ignores. Andrade and Kaplan measure the change in the value of their sample of financially distressed companies from a point in time two months prior to the highly leveraged transaction to a point in time immediately after the resolution of distress. Mr. Baliban's calculation of economic harm in paragraph 23 and Exhibit 5, similarly relies on the value of Marvel prior to the issuance of the Marvel III Notes. Andrade and Kaplan estimate the change in value for each company in their entire sample to determine whether the highly leveraged transaction and the financial distress costs when considered together increase or decrease the value of their sample companies. If one assumes that the Indenture Covenants forced Marvel into a highly leveraged position, as Mr. Baliban does, then this measure would be an appropriate alternative measure of the expected net cost or benefit of the Indenture Covenants. Andrade and Kaplan indicate on p. 1458 that

"Table V reports that the total capital of our sample firms earns marginally more than the industry, with a mean return of 12 percent and a median return of 4 percent. Adjusted for market returns, the sample firms earn a mean return of 8 percent and a median return of 5 percent. With standard errors of roughly 8 percent, none of these returns differs significantly from zero. These results, therefore, indicate that the combination of benefits from the HLTs and costs of distress did not decrease the value of capital and, in all likelihood, increased it."

As such, this analysis from Andrade and Kaplan in conjunction with Mr. Baliban's assumption that the Indenture Covenants forced Marvel to become a highly leveraged firm, indicates that the expected cost of financial distress to Marvel at the time that the Holding Company Notes were issued was zero. This estimate of zero economic harm, which comes directly from Andrade and Kaplan's study, is again based on the incorrect

<sup>&</sup>lt;sup>6</sup> Gregor Andrade and Steven N. Kaplan, "How Costly is Financial (Not Economic) Distress? Evidence from Highly Leveraged Transactions that Became Distressed," *Journal of Finance*, Vol. LIII, No. 5 (October, 1998), p. 1458.

assumption that it was certain that Marvel would experience financial distress because of the Indenture Covenants.

- Fifth, there is other additional important evidence in the Andrade and Kaplan 13. study that Mr. Baliban ignores. Besides the evidence from Andrade and Kaplan discussed in paragraph 12, Andrade and Kaplan are also careful to point out in their study that in order to estimate the costs of financial distress, it is important to find a sample of firms that experienced financial distress, but did not suffer economic distress.<sup>7</sup> This is important because if Andrade and Kaplan's estimates of the costs of financial distress capture the effects of declines in the business prospects of the firms in their sample, then the estimated costs of financial distress will be overstated. In the latter part of their study, they perform an analysis to see if their sample firms indeed suffered any economic distress. From the 31 financially distressed firms in their sample, Andrade and Kaplan determine that 17 firms experienced economic distress (a negative economic "shock") and 14 did not, which Andrade and Kaplan call their "no shock" sample. In Panel B of Table IX (p. 1474), they report zero costs of financial distress for their "no shock" sample. Thus, using the Andrade and Kaplan "no shock" sample yields estimated financial distress costs of zero for Marvel.
- Andrade and Kaplan discuss the results from their "no shock" sample in 14. numerous places throughout their paper, so that a careful reader of the paper gets a balanced view of their results. For example, Andrade and Kaplan state in discussing

<sup>&</sup>lt;sup>7</sup> Financial distress costs are the costs that arise solely from firms having debt and other liabilities in their capital structure. Economic distress costs refer to the costs that a firm bears because of diminished prospects for its business, unrelated to its capital structure. Empirically, it is often difficult to disentangle financial and economic distress costs, because many firms that experience financial distress do so because their business is deteriorating, that is, they are simultaneously experiencing economic distress.

Page 10 of 46

Table VIII (p. 1470), "The evidence in Table VIII, therefore, indicates that firms that do not experience shocks have significantly lower estimated costs of distress than firms that did, both statistically and economically. In fact, the estimated costs of financial distress for the "no shock" subsample are statistically indistinguishable from zero." Later, on p. 1471, after discussing the results for both Table VIII and Table IX, they state, "Overall. then, when the effects of adverse economic shocks are filtered out, our estimates imply small or insignificant costs of pure financial distress." In the concluding section of their paper, on p. 1487, they state, "Because we cannot eliminate economic distress or the effects of economic shocks completely, our estimates for the overall sample should be considered upper bounds on the costs of pure financial distress for these firms." Finally, even in the abstract of the paper on p. 1443, they state, "For a subset of firms that do not experience an adverse economic shock, financial distress costs are negligible." This is important evidence ignored by Mr. Baliban.

15. As I indicate in paragraphs 8 and 9, I believe that it is inappropriate to estimate the expected costs of financial distress assuming it was certain that Marvel would fail (Mr. Baliban's "financial distress certainty assumption"), and that it is also inappropriate to assume that all of the expected costs of financial distress are due to the Indenture Covenants (Mr. Baliban's "sole causation assumption"). To determine the expected financial distress costs associated with the Indenture Covenants, I compute the incremental probability of financial distress associated with the Indenture Covenants by

estimating the difference in Marvel's probability of financial distress with and without the issuance of the Marvel III Notes at the time of their issuance, February 15, 1994.

- 16. The probability of financial distress for any scenario is derived from an option model.<sup>9</sup> This model estimates the likelihood that the value of the assets will be less than the face value of the debt at the time the debtholders are to be repaid. If the value of the assets is less than the face value of the debt, then in all likelihood, the equity holders will prefer to let the debtholders have the company rather than repay the debt, since the repayment required exceeds the value of the assets. This model has various inputs including the value of a company's equity, the volatility of this equity, the amount of a company's liabilities and the time to maturity of those liabilities.
- 17. For purposes of estimating the probability of financial distress for Marvel without the issuance of the Marvel III Notes, I use the total liabilities that Marvel had at the time of issuance of the Marvel III Notes, using its December 31, 1993 fiscal year end financial statements. Calculating the probability of financial distress to the due date of the Marvel III Notes implicitly assumes that Marvel would have simply rolled over all of its liabilities in the absence of the Marvel III Notes. Consistent with the theoretical underpinnings of the model, I take all the existing liabilities and treat them as zero coupon bonds with an assumed maturity identical to the due date of the Marvel III Notes. Appendix A contains the calculation of the value of Marvel's liabilities to be used in the model based on Marvel's actual liabilities as of December 31, 1993.

<sup>8</sup> I focus my analysis on the Marvel III Notes because Mr. Baliban asserts that the "Marvel III Note issuance alone would have been sufficient to cause all of the harm described herein." (Report of Jeffrey L. Baliban, paragraph 7).

<sup>&</sup>lt;sup>9</sup> Stephen Hillegeist, Elizabeth Keating, Donald Cram and Kyle Lundstedt, "Assessing the Probability of Bankruptcy," Review of Accounting Studies, 9, 2004, pp. 5-34.

- 18. For purposes of estimating the probability of distress for Marvel with the issuance of the Marvel III Notes, I have to make an assumption about the expected debt level of Marvel assuming the existence of the Marvel III Notes. For purposes of this calculation. I base the expected amount of debt on three different scenarios. One scenario is the expectation of analysts about the amount of debt that Marvel would have subsequent to the issuance of the Marvel III Notes ("Scenario 1"). The second and third scenarios assume that Marvel wanted to buy assets beyond its ability to do so with internally generated cash flows and presumes, for illustrative purposes, that the Indenture Covenants forced Marvel to issue debt to buy those assets. As I describe more fully in paragraph 20, the Marvel credit agreement constrained the amount of debt that Marvel could issue as a function of its financial performance, and I use these limitations on indebtedness in conjunction with the actual financial results of Marvel in 1993 ("Scenario 2") and analysts' projections of performance for 1994 ("Scenario 3") to determine the maximum amount of debt that Marvel could have issued at that time, given the restrictions in its own credit agreement. As in the case where I use Marvel's actual debt as of December 31, 1993, I estimate the probability of financial distress to the due date of the Marvel III Notes. Thus, I estimate the probability of financial distress to the same point in time with and without the Marvel III Notes.
- 19. Immediately subsequent to the issuance of the Marvel III Notes, analysts were forecasting a reduction in the amount of debt that Marvel would have going forward. 10 For example, a Salomon Brothers research report dated April 8, 1994 forecasts a lower

<sup>10</sup> I reviewed analyst reports produced in discovery and from the Investext database around the time of the issuance of the Marvel III Notes

20. As discussed in paragraph 18, I also consider two alternative scenarios beyond Scenario 1, where the assumed amount of Marvel debt increases relative to Marvel's actual debt at the time of the Marvel III Notes. I use the restriction on leverage in the September 17, 1992 Marvel Credit and Guarantee Agreement that specifies a maximum amount of debt equal to three times annualized consolidated operating cash flow in conjunction with Marvel's actual consolidated operating cash flow for 1993 (Scenario 2) and a forecast of its consolidated operating cash flow for 1994 (Scenario 3).<sup>14</sup> Further, I

<sup>11 &</sup>quot;Marvel Entertainment - Momentum Slows; Downgrade to Hold," Salomon Brothers, April 8, 1994.

<sup>12 &</sup>quot;MRV: Spiderman and Company Will Recover; Changing Rating to Long-Term Buy," Wheat First Butcher Singer, April 13, 1994.

<sup>13 &</sup>quot;Marvel Entertainment Group - Company Report," The First Boston Corporation, July 21, 1994.

<sup>&</sup>lt;sup>14</sup> See the September 17, 1992 Marvel Credit and Guarantee Agreement, Section 8.1 (a). For purposes of this calculation, I ignore the prohibitions on issuing additional debt in Section 8.2 of that credit agreement.

Page 14 of 46

assume that Marvel had incurred those forecasted maximum debt levels as of February 15, 1994. 15 Appendix B contains the calculation of the maximum debt levels for these two scenarios. This additional debt can only be attributed to the Indenture Covenants if one assumes that those covenants forced Marvel to take on the maximum amount of debt allowed by Marvel's own credit agreements. Further, one must assume that it was optimal for Marvel, had the Holding Company Notes never been issued, to purchase assets beyond that obtainable from its internally generated cash flows. As I indicated in paragraph 19, analysts were not forecasting asset purchases of this magnitude at the time.

- 21. Using the forecasted debt levels in conjunction with the value of Marvel's equities and other liabilities as of February 15, 1994, I estimate the probability of distress for these two different assumptions about the expected level of Marvel's indebtedness. I then calculate the incremental probability of distress using these two scenarios by subtracting the probability of distress given Marvel's actual debt at the time of the issuance of the Marvel III Notes from the probability of distress I calculate for each of the two scenarios described above. These calculations are contained in Exhibit 4 and yield incremental probabilities of distress of 1.61 percent for Scenario 2 and 2.79 percent for Scenario 3.
- 22. To calculate the incremental expected costs of financial distress associated with the issuance of the Marvel III Notes, I multiply the incremental probability of financial

Section 8.2 specifically restricted Marvel from issuing any additional debt beyond relatively small, incremental amounts for identified purposes, unless they obtained prior consent from the lenders. The annualized consolidated operating cash flow is defined in Section 1.1 of that agreement.

<sup>15</sup> The maximum amount of debt based on the 1993 consolidated operating cash flow could have conceivably been issued by February 15, 1994 had Marvel obtained a waiver of Section 8.2. Whether Marvel could have convinced its lenders to let them issue debt on February 15, 1994 based on forecasted results for the fiscal year ending December 31, 1994 is somewhat more speculative, but provides a conservative estimate of expectations of debt as of February 15, 1994.

distress under each scenario from Exhibit 4 times 15 percent (the midpoint of the 10 to 20 percent range estimate of financial distress costs used by Mr. Baliban) times the value of Marvel as of February 15, 1994 of \$2,874.4 million.<sup>16</sup> Multiplying 15 percent times Marvel's value of \$2,874.4 million times the incremental probability of financial distress under the two scenarios of 1.61 percent and 2.79 percent results in estimates of the incremental expected costs of financial distress associated with the issuance of the Marvel III Notes at the time of their issuance of \$6.9 million and \$12.0 million. Panel A of Exhibit 5 details these calculations.

23. As I indicate in paragraph 13, Andrade and Kaplan are careful to point out in their study that in order to estimate the costs of financial distress, it is important to find a sample of firms that experienced financial distress, but did not suffer economic distress. As I also indicated previously, Andrade and Kaplan perform an analysis on their "no shock" sample and determine that these firms experience no costs of financial distress. As such, an estimate of expected financial distress costs using Andrade and Kaplan's "no shock" sample yields estimated financial distress costs of zero (see Exhibit 5, Panel B).

## IV. Analysis of the November 12, 1996 Announcements

24. On November 12, 1996, details of the Andrews Group proposal to purchase Marvel equity were announced. 17 Mr. Baliban claims that the market reaction to the November 12, 1996 announcement of the Andrews Group proposal can be used to measure the minimum harm caused by the Indenture Covenants. Marvel's stock price the

<sup>16</sup> Note that to be consistent with Andrade and Kaplan's 10 to 20 percent estimate of financial distress costs, I should be applying that cost estimate to the value of Marvel at the end of the fiscal year prior to the onset of financial distress as I discuss in paragraph 10. However, since I am performing a calculation of expected financial distress costs based on information available only at the time that the Marvel III Notes were issued, I apply the incremental probability to Marvel's value as of February 15, 1994.

<sup>17 &</sup>quot;Marvel Receives Andrews Proposal," PR Newswire, November 12, 1996.

the "sole causation assumption."

25. The market was well aware of the existence of the Indenture Covenants prior to the November 12, 1996 announcement. Marvel (Parent) Holdings Inc. issued a prospectus for the Marvel Parent Notes dated October 13, 1993, which was stamped received at the S.E.C. on October 19, 1993. Page 9 of this prospectus states that "The Indenture will require the Issuer to hold at all times, directly or indirectly, a majority of the outstanding shares of voting stock of Marvel ..." (Section 4.09 of the Indenture). In addition, pages 54-57 of the prospectus describe in detail the Indenture Covenants regarding the "Limitation on Debt of Marvel and Its Subsidiaries and Limitation on Preferred Stock of Marvel" (Section 4.04 of the Indenture) and "Limitation on Restricted Payments" (Section 4.05 of the Indenture).

- 26. Similarly, Marvel III Holdings Inc. issued a Form S-1 Registration Statement for the Marvel III Notes dated March 31, 1994 which was stamped received at the S.E.C. on March 31, 1994. On page 12 of this registration statement, a general description of the covenants on debt and preferred stock of Marvel (Section 4.04 of the Indenture). restricted payments (Section 4.05 of the Indenture), required stock ownership (Section 4.09 of the Indenture) and the Tax Deconsolidation Event (Section 4.14 of the Indenture) is provided. Also, Exhibit 4.10 of this registration statement includes the full Indenture where these covenants are fully described.
- 27. Marvel's own documents discussed certain provisions of the Holding Company Notes. Forms 10-K for the years ended 1994 and 1995 broadly refer to the Holding Company Notes covenants: "The indentures governing ... [the Holding Companies'] indebtedness contain various covenants relating to the Company, including certain limitations on the Company's indebtedness." 18 Maryel Entertainment Group issued a Form S-3 Registration Statement dated March 14, 1995, which was stamped received at the S.E.C. on March 16, 1995. In that registration statement, the Company provides some broad outlines of the restrictions. In Marvel Entertainment Group, Inc.'s proxy statements dated April 18, 1994 (stamped received April 19, 1994), April 21, 1995 (stamped received April 25, 1995) and April 18, 1996 (stamped received April 19, 1996), there is language that describes the Tax Sharing Agreement in the Marvel III Notes. For example, the April 18, 1994 proxy statement for Marvel Entertainment Group, Inc. contains the following language:

<sup>&</sup>lt;sup>18</sup> Marvel Entertainment Group, Inc., Form 10-K for the fiscal year ended December 31, 1994, p. 18; Marvel Entertainment Group, Inc., Form 10-K for the fiscal year ended December 31, 1995, p. 19.

"In the event that, prior to the Marvel Collateral Release Date (as defined in the Indenture), Marvel III and the Company [referring to Marvel Entertainment Group, Inc.] (excluding its subsidiaries) cease to be members of the same consolidated federal tax group or the Marvel Tax Sharing Agreement ceases to be in full force and effect, each holder of Notes will have the right to require Marvel III to repurchase all or a portion of such holder's Notes at a price equal to 101% of the principal amount of such Notes plus accrued and unpaid interest, if any, to the date of repurchase."19

- 28. There is also evidence that analysts were aware of the Indenture Covenants in the Holding Company Notes as well. In a research report dated April 27, 1995 by NationsBank<sup>20</sup> on the Marvel Holdings Inc., Marvel (Parent) Holdings Inc., and Marvel III Holdings Inc. Notes, the major Indenture Covenants and the Tax Sharing Agreement are discussed in Appendices D and E. While the major Covenants and the Tax Sharing Agreement are discussed in this document, the document does not discuss the consequences if Marvel ceases to be part of the same consolidated federal tax group. But as I indicate in the paragraph above, that was made clear in the Proxy Statements. Thus, investors should have been well aware of the existence of the Indenture Covenants well before November 12, 1996.
- 29. Mr. Baliban claims in paragraph 37 of his report that November 12, 1996 is when "the market learned for the first time that the Indenture Covenants were an obstacle preventing Marvel from obtaining the necessary equity infusion needed for restructuring given that Mr. Perelman, the only investor that could provide such funding without breaching the Indenture Covenants, was unwilling to do so absent relief from the Indenture Covenants." It is not true that the market was unaware of the potential role of

<sup>&</sup>lt;sup>19</sup> Marvel Entertainment Group, Inc., Schedule 14A dated April 18, 1994, p. 20.

<sup>&</sup>lt;sup>20</sup> "Marvel - SkyBox Acquisition a Slam Dunk," High Yield Research - Entertainment, NationsBank, April 27, 1995.

Page 19 of 46

the holders of the Holding Company Notes regarding an equity infusion from entities controlled by Mr. Perelman. On October 17, 1996, the Andrews Group announced that it expected to make a proposal to Marvel Entertainment to purchase new equity capital. That announcement included the following statement: "This proposal will be subject to a number of conditions, including the waiver by Marvel's banks of certain financial covenants contained in its bank credit facilities and the restructuring of those facilities to provide for Marvel's cash requirements. The proposal would also be subjected to an agreement among Marvel, its banks, the holders of certain Marvel holding company bonds and Andrews Group on the terms of the Andrews Group purchase."<sup>21</sup> In addition. the October 17, 1996 announcement included the statement that "any such purchase would result in 'substantial' dilution to the existing Marvel shares, including the Marvel shares which serve as collateral for Marvel holding company bonds." Thus, the market knew by no later than October 17, 1996 that the Andrews Group proposal would be subject to approval from the holders of the Holding Company notes and that the shares held in collateral for the noteholders would be substantially diluted in the transaction.

The market reaction to the announcement occurred on October 18, 1996, as the 30. announcement was made after the close of trading on October 17, 1996. On that date, the market value of Marvel's equity declined by \$0.25 per share, or approximately 5.4 percent, which when multiplied by the 101.8 million shares outstanding at the time results in a loss of value of approximately \$25 million. Although this is not a conceptually correct measure of the expected cost of financial distress as it suffers from the "financial distress certainty assumption" and the "sole causation assumption", it is a

<sup>&</sup>lt;sup>21</sup> "Andrews Grp-Toy Biz -3-: Andrews Might Buy Equity at Marvel," Dow Jones News Service, October 17, 1996, 17:59.

better estimate of what Mr. Baliban purports to measure with his analysis of the market reaction to the November 12, 1996 announcements.

- 31. Another assumption that Mr. Baliban must make to estimate damages from the November 12, 1996 price reaction is that no other news concerning Marvel is released on November 12, 1996. But that is not true - on that day, Marvel made an announcement containing several other news items with negative implications for the company.<sup>22</sup>
- 32. The November 12, 1996 Marvel announcement indicated that Marvel had lost 12 cents per share for the third quarter. While an October 8, 1996 announcement indicated that Marvel expected a loss in the range of 7 cents to 12 cents a share, the November 12, 1996 announcement confirmed that the loss was at the bottom of the range reported in the October 8 announcement.
- 33. In addition, the November 12, 1996 Marvel announcement indicated that Marvel expected to post a loss of 25 to 30 cents per share for the fourth quarter of 1996 and that they expected a loss for the year between 52 and 57 cents per share. Prior to the November 12, 1996 announcement, but after the October 8, 1996 announcement, Merrill Lynch, in a research report dated October 9, 1996, said that "Management has indicated their expectation for a fourth quarter loss; assuming a modest loss this would result in a full year loss of at least \$0.40/sh". As such, management's forecast of the earnings for the fourth quarter of 1996 and the 1996 fiscal year end released on November 12, 1996 would have likely been viewed as additional negative news because the only analyst that I could find who publicly updated his or her forecast after the October 8 announcement was predicting a smaller year-end loss.

<sup>&</sup>lt;sup>22</sup> "Marvel 3Q96 Results and Performance Update," PR Newswire, November 12, 1996.

<sup>&</sup>lt;sup>23</sup> "Marvel Ent - Rating and Estimates Lowered," Merrill Lynch, October 9, 1996.

- 34. In addition, the November 12, 1996 Marvel announcement indicated that "Given the unfavorable market conditions in trading cards and publishing, Marvel is evaluating whether there has been impairment to goodwill and other intangible assets and is considering restructuring and other actions, all of which could result in substantial 1996 year end charges." Again, while it was known that Marvel's business had been deteriorating, the announcement that it was evaluating a restructuring plan and whether to write off its goodwill suggests that Marvel's management believed that the downturn in its business was not temporary. This also represented news with negative implications for Marvel.
- 35. In addition, the November 12, 1996 Marvel announcement indicated that as a result of the third quarter's financial results, Marvel was in default under its credit agreements and was seeking waivers. This had been previously announced on October 8, 1996. However, the November 12, 1996 announcement contained some additional information. In particular, Marvel announced that "in the absence of waivers as of this date, Marvel has reclassified the balance of its long-term debt to current liabilities." As such, the market learned that Marvel had been unsuccessful over the past month in obtaining waivers to its credit agreements.
- 36. Finally, the November 12, 1996 Andrews Group announcement included the details of the Andrews proposal to provide an equity infusion to Marvel. The market had learned on October 17, 1996 that the Andrews Group expected to make a proposal to Marvel to purchase new equity capital and that "any such purchase would result in 'substantial' dilution to the existing Marvel shares, including the Marvel shares which

Page 22 of 46

serve as collateral for Marvel holding company bonds."24 So while the market had been forewarned about dilution, the November 12, 1996 announcement now included the specifics of that proposal.

- 37. Specifically, the Andrews Proposal called for the Andrews Group to buy 409.8 million new Marvel Shares with cash or shares in Toy Biz at a value of \$0.8541 per share, or \$350 million. There had been 101.8 million shares outstanding prior to the offer. Subsequent to the offer there would be 511.6 million shares outstanding. The Andrews Proposal likely provided the market with information about the value of the company. The Andrews Group would have been considered an insider and was making a proposal that valued the equity after the transaction at approximately \$437 million (511.6 million shares multiplied by \$0.8541 per share), including the \$350 million equity infusion. Since the value of the equity had been approximately \$470.8 million prior to the Andrews Proposal (101.8 million shares multiplied by \$4.625), the proposal implicitly contained a substantially lower value for Marvel's existing equity.
- 38. It is difficult to imagine that the market would not view this proposal as relevant information in assessing the value of Marvel's common stock. Indeed, an analyst report dated November 15, 1996 from Merrill Lynch which discussed the Andrews Proposal indicated that "We believe we are supposed to think this is good news and it certainly is better than letting the company go under but putting it mildly, we were disappointed. It had been our strong sense, in the absence of any real information regarding the recent negative turn of events, that there was not a lot of equity left in the company based on

<sup>&</sup>lt;sup>24</sup> "Andrews Grp-Toy Biz -3-: Andrews Might Buy Equity at Marvel," Dow Jones News Service, October 17, 1996, 17:59.

debt of over \$650MM and quickly disappearing cash flow (excluding the ever stronger ToyBiz); the recent offer confirms our suspicion."<sup>25</sup>

39. As such, there is no way to legitimately conclude, as Mr. Baliban does in paragraph 37 in discussing the market reaction observed on November 12, 1996, "that this loss of \$190 million was directly attributable to the Indenture Covenants." As I have shown, the market knew prior to November 12, 1996 that the Andrews Proposal would require negotiation with the Holding Company noteholders. In addition, there was additional negative news announced on that day which would have led to declines in value. Finally, the implicit valuation in the Andrews Proposal was lower than the prevailing market value of equity of Marvel.

## V. Estimation of the Prudent Investor Rate

40. Counsel for the defendants has asked me to compute the Prudent Investor Rate for various time periods using simple interest. The Prudent Investor Rate is described in Chang's Holdings, S.A. v. Universal Chemical and Coatings, Inc. as decided in the Court of Chancery of Delaware, New Castle County, on November 22, 1994. The opinion sets out the types of investments and the percentage of funds allocated to each type of investment by a hypothetical prudent investor. Despite enumerating the type of investment and percentage of the portfolio allocated to each type of investment, certain judgments are required to perform an actual calculation of the Prudent Investor Rate. In Exhibit 6, I calculate the Prudent Investor Rate and describe in detail the assumptions I make in performing those calculations.

> /s/ Robert W. Holthausen Robert W. Holthausen March 3, 2006

<sup>&</sup>lt;sup>25</sup> "Not So Entertaining: The Squeeze," Merrill Lynch, November 15, 1996.

## **ROBERT W. HOLTHAUSEN** February, 2006

## School Address

The Wharton School University of Pennsylvania 1300 Steinberg-Dietrich Hall Philadelphia, PA 19104-6365

Tel: (215) 898-7781 Fax: (215) 573-2054

EMAIL: holthausen@wharton.upenn.edu

## Education

1975-1979 University of Rochester, Graduate School of Management

Rochester, New York

Ph.D. in Business Administration, May, 1980

1969-1971 University of Rochester, Graduate School of Management

> Rochester, New York M.B.A., June, 1971

1965-1969 St. Lawrence University

Canton, New York B.A., June, 1969

## **Honors and Awards**

Wharton Graduate Association Excellence in Teaching Award, 2003-2004,1990-91 Wharton Undergraduate Excellence in Teaching Award, 2004-2005, 1995-1996, 1992-1993, 1990-199, 1989-1990

Welling Professorship, George Washington University, 1998-2000 David J. Hauck Undergraduate Teaching Award, 1992-1993

Peat, Marwick, Mitchell and Co. Grant, 1982-1983

Managerial Economics Research Center Grant, University of Rochester, 1979

Richard D. Irwin Foundation Fellow, 1978-1979

Arthur Andersen & Co. Doctoral Dissertation Grant, 1978-1979

Dean's Honor List, University of Rochester, 1976-1977

University Fellowship at the University of Rochester, 1969-1971, 1975-1978

Beta Gamma Sigma, University of Rochester, June. 1971

## **Professional Stature and Memberships**

Certified Public Accountant (awarded New York State Certificate, March, 1973) American Institute of Certified Public Accountants American Accounting Association

American Finance Association

## Experience

2004-present Chair, Department of Accounting

The Wharton School University of Pennsylvania Philadelphia, Pennsylvania

1992-Present Nomura Securities Company Professor

of Accounting and Finance

The Wharton School University of Pennsylvania Philadelphia, Pennsylvania

2001-2002 Visiting Professor of Finance

Harvard Business School Harvard University Boston, Massachusetts

1989-Present Professor of Accounting and Finance

The Wharton School University of Pennsylvania Philadelphia, Pennsylvania

1983-1989 Associate Professor of Accounting and Finance

**Graduate School of Business** 

University of Chicago Chicago, Illinois

1979-1983 Assistant Professor of Accounting and Finance

**Graduate School of Business** 

University of Chicago Chicago, Illinois

1977-1978 Instructor

**Graduate School of Management** 

University of Rochester Rochester, New York

1973-1975 Assistant Professor of Accounting and Finance

State University College of Arts and Sciences

Plattsburgh, New York

1971-1973 Staff and Senior Audit Accountant

Price Waterhouse & Co. Rochester, New York

1969-1971 Financial Analyst

Mobil Chemical Corporation, Plastics Division

Macedon, New York

## Research

## Publications:

"Testing the Relative Power of Accounting Standards versus Incentives and Other Institutional Features to Influence the Outcome of Financial Reporting in an International Setting", <u>Journal of Accounting and Economics</u> Vol. 36. No. 1-3 (December, 2003), pp. 271-283.

## Publications (continued):

"The Relevance of the Value Relevance Literature for Financial Accounting Standard Setting," <u>Journal of Accounting and Economics</u> Vol 31. No. 1 –3 (September, 2001), pp. 3-76 (with Ross Watts).

"Corporate Governance, Chief Executive Officer Compensation, and Firm Performance," <u>Journal of Financial Economics</u> Vol 51. No.3 (March, 1999), pp. 371–406 (with John E. Core and David F. Larcker).

"The Financial Performance of Reverse Leveraged Buyouts," <u>Journal of Financial Economics</u> Vol 42. No. 3 (November, 1996), pp. 293-332 (with David F. Larcker)

"Business Unit Innovation and the Structure of Executive Compensation," <u>Journal of Accounting and Economics</u> Vol 19. Nos. 2&3 (March-May, 1995), pp. 279-314 (with David F. Larcker and Richard Sloan).

"Annual Bonus Schemes and the Manipulation of Earnings," <u>Journal of Accounting and Economics</u> Vol. 19, No. 1 (February, 1995), pp. 29-74 (with David F. Larcker and Richard Sloan).

"The Prediction of Stock Returns Using Financial Statement Information," <u>Journal of Accounting and Economics</u> Vol. 15, No. 2/3 (June-September, 1992), pp. 373-412 (with D. Larcker).

"The Effect of Bond Rating Agency Announcements on Bond and Stock Prices," <u>Journal of Finance</u> Vol. XLVII, No. 2 (June, 1992), pp. 733-752 (with J. Hand and R. Leftwich).

"Large Block Transactions, The Speed of Response, and Temporary and Permanent Stock Price Effects," <u>Journal of Financial Economics</u> Vol. 26, No. 1 (July, 1990), pp. 71-95 (with R. Leftwich and Dave Mayers).

"Accounting Method Choice: Opportunistic Behavior, Efficient Contracting and Information Perspectives," <u>Journal of Accounting and Economics</u>, Vol. 12, No. 1-3 (January, 1990), pp. 207-218.

"The Effect of Informedness and Consensus on Price and Volume Behavior," The Accounting Review, Vol. 65, No. 1 (January, 1990), pp. 191-208 (with R. Verrecchia).

"The Effect of Sequential Information Releases on the Variance of Price Changes in an Intertemporal Multi-Asset Market," <u>Journal of Accounting Research</u>, Vol. 26, No. 1 (Spring, 1988) pp. 82-106 (with R. Verrecchia).

"The Effect of Large Block Transactions on Security Prices: A Cross-Sectional Analysis," <u>Journal of Financial Economics</u>, Vol. 19, No. 2 (December, 1987), pp. 237-267 (with R. Leftwich and D. Mayers).

"Predicting Audit Qualifications with Financial and Market Variables," <u>Accounting Review</u>, Vol. 62, No. 3 (July, 1987), pp. 431-454 (with N. Dopuch and R. Leftwich).

"The Effects of Bond Rating Changes on Common Stock Prices," <u>Journal of Financial Economics</u>, Vol. 17, No. 1 (September, 1986), pp. 57-90 (with R. Leftwich).

"Abnormal Stock Returns Associated with Media Disclosures of 'Subject to' Qualified Audit Opinions," <u>Journal of Accounting and Economics</u>, Vol. 8, No. 2 (June, 1986), pp. 93-118 (with N. Dopuch and R. Leftwich).

## **Publications (continued):**

"Qualified Audit Opinions and Stock Prices: Information Content, Announcement Dates and Concurrent Disclosures," <u>Journal of Accounting and Economics</u>, Vol. 6, No. 1 (April, 1984), pp. 3-38 (with P. Dodd, N. Dopuch and R. Leftwich).

"The Economic Consequences of Accounting Choice: Implications of Costly Contracting and Monitoring," <u>Journal of Accounting and Economics</u>, Vol. 5, No. 2 (August, 1983), pp. 77-119 (with R. Leftwich).

"Anomalous Abnormal Returns Following Quarterly Earnings Announcements," <u>Proceedings:</u> The Seminar on the Analysis of Security Prices, Volume 28, No. 1 (May, 1983), pp.37-60.

"Evidence on the Effect of Bond Covenants and Management Compensation Contracts on the Choice of Accounting Techniques: The Case of the Depreciation Switch-Back," <u>Journal of Accounting and Economics</u>, Vol. 3, No. 1 (March, 1981), pp. 73-109.

## **Book in Progress**

<u>Corporate Valuation: Theory, Practice and Evidence, McGraw-Hill/Irwin (with Mark E. Zmijewski).</u>

## Research in Progress

"The Effect of Personal Taxes on the Value of Interest Tax Shields," (with Jennifer Blouin).

## Miscellaneous:

"Performance, Leverage and Ownership Structure in Reverse LBOs," <u>Journal of Applied Corporate Finance</u>, Vol 10. No.1 (Spring, 1997) (with Dave Larcker), pp. 8-20.

"Discussion of 'Estimation and Market Valuation of Environmental Liabilities Relating to Superfund Sites', Supplement to <u>Journal of Accounting Research</u>, Studies on Accounting, <u>Financial Disclosures and the Law</u>, Vol. 32 (1994), pp. 211-219.

"Research on Accounting and Capital Markets," in <u>Accounting Dissertations: Research Design and Implementation</u>, (1982), (Proceedings of the Big Ten Accounting Doctoral Consortium), pp. 65-79.

"A Critique of Price-Level Adjusted Accounting," <u>Hospital Progress</u>, August, 1976, pp. 52-55 (with J. Talbott).

"Fact Not Fiction - PL(E)AS(E)," The Michigan CPA, July-August, 1974, pp. 35-39 (with J. Talbott).

## **Professional Activities**

## **Editorial Boards:**

Editor of the Journal of Accounting and Economics, 2005-present. Associate Editor of the Journal of Accounting and Economics, 1985-1997. 2000-2005 Editorial Board of the Journal of Accounting Research, 1982-2005. Consulting Editor of the Journal of Accounting and Economics, 1997-2000. Associate Editor of the Accounting Review, 1994-1996. Associate Editor of the Accounting Review, 1986-1987. Consulting Editor of the Accounting Review, 1987-1989 Member of the Editorial Board of the Accounting Review, 1989-1993, 1982-1985 Editorial Collaborator for the Journal of Financial Economics, since 1984.

## **Other Professional Contributions:**

Deloitte and Touche Foundation Doctoral Fellowship Selection Committee, 1996, 1997, 1998, 1999

Editorial Collaborator for the Journal of Finance, since 1987.

Program Committee for the 1996 AAA Annual Meetings in Charge of Special Research Sessions

Member of Planning Committee for 1995 AAA/FASB Financial Research Conference.

Distinguished Visiting Faculty, 1994 and 1998 AAA Doctoral Consortium Member of the 1993 New Faculty Consortium Planning Committee

Group Leader, 1993 New Faculty Consortium

Committee.

Member of the 1993, 1996 & 1997 AAA Research Advisory Committee Member of the 1993 and 1988 AAA Competitive Manuscript Award

Member of the 1992 Western Finance Association Program Committee Member of the 1986 AAA Program Advisory Committee.

Resident Faculty for the 1983 AAA Doctoral Consortium.

Member of the 1982 AAA Notable Contributions to Accounting Literature

Member of the 1985, 1996 AAA Research Advisory Committee. Member of the 1984 AAA Notable Contributions to Accounting Literature

## **ADDENDUM**

## **Invited Research Conferences:**

Participant, Utah Winter Accounting Conference, University of Utah (February, 2005)

Organizer, Journal of Accounting and Economics Research Conference, Massachusetts Institute of Technology, (October, 2005)).

Participant, Journal of Accounting Research Conference, University of Chicago (May, 2005)

Participant, Journal of Accounting Research Conference, University of Chicago (May, 2004)

Participant, Utah Winter Accounting Conference, University of Utah (February, 2004)

Participant, Journal of Accounting Research Conference, University of Chicago (May, 2003)

Discussant, Journal of Accounting and Economics Research Conference, Massachusetts Institute of Technology (October 2002).

Participant, Utah Winter Finance Conference, University of Utah (February, 2005)

Participant, Journal of Accounting and Economics Research Conference, Massachusetts Institute of Technology, (June 2001).

Participant, Summer Financial Decisions and Control Workshop, Harvard University (June, 2001)

Presenter, The 2000 Journal of Accounting and Economics Conference, April 2000, "The Relevance of the Value Relevance Literature for Financial Accounting Standard Setting."

Participant AAA/FASB Financial Reporting Research Conference (December 1998).

Participant, Summer Financial Decisions and Control Workshop, Harvard University (July, 1998).

Participant, <u>Journal of Accounting Research</u> Conference on Enhancing the Financial Reporting Model, University of Chicago (May, 1998)

Participant AAA/FASB Financial Reporting Research Conference (December 1997).

Presenter, Stanford University Accounting Research Summer Seminar, July, 1997, "Corporate Governance, Chief Executive Officer Compensation and Firm Performance".

Participant, Summer Financial Decisions and Control Workshop, Harvard University (July, 1997).

Participant AAA/FASB Financial Reporting Research Conference (December 1996).

Participant, Summer Financial Decisions and Control Workshop, Harvard University (July, 1996).

Participant, <u>Journal of Accounting Research</u> Conference on Recognition, Measurement, and Disclosure Issues in Accounting, University of Chicago (May, 1996)

## Invited Research Conferences (continued):

Organizer & Discussion Head AAA/FASB Financial Reporting Research Conference (December 1995).

Participant, <u>Journal of Accounting and Economics</u> Conference on Contemporary Financial Reporting Issues, University of Rochester (October, 1995).

Participant, Summer Financial Decisions and Control Workshop, Harvard University (July, 1995).

Presenter, AAA/FASB Financial Reporting Research Conference (December 1994), "Research Investigating the Economic Consequences of Accounting Standards."

Presenter, <u>Journal of Accounting and Economics</u> Conference on Organizations, Incentives and Innovation, University of Rochester, (November, 1993), "Business Unit Innovation and the Structure of Executive Compensation."

Presenter, Summer Financial Decisions and Control Workshop, Harvard University (July, 1993), "Boards of Directors, Ownership Structure and CEO Compensation".

Participant, Conference on Financial Reporting, Harvard University, (December, 1992).

Presenter, Seminar on the Analysis of Security Prices, Center for Research in Security Prices, University of Chicago (May, 1992), "The Prediction of Stock Returns Using Financial Statement Information."

Presenter, AFA Annual Meeting, New Orleans, LA (January, 1992), "The Prediction of Stock Returns Using Financial Statement Information."

Participant, <u>Journal of Accounting and Economics</u> Conference on Organizational Structure and Management Compensation, University of Rochester (November, 1991).

Presenter, Sidney G. Winter Distinguished Lectures in Accounting, University of Iowa (September, 1991), "The Prediction of Stock Returns Using Financial Statement Information".

Presenter, Making Statistics More Effective in Schools of Business, The Wharton School, University of Pennsylvania (June, 1991), "Predicting Financial Distress, Bonds Ratings, Takeover Activity and Stock Price Performance Using Multivariate Analysis".

Presenter, Seminar on the Analysis of Security Prices, Center for Research in Security Prices, University of Chicago (November, 1990), "Large Block Transactions, the Speed of Response and Temporary and Permanent Price Effects."

Presenter, Securities Industry Institute Conference on Securities Analysis (March, 1990), "Forecasting Stock and Bond Returns".

Presenter, Stanford Accounting Summer Conference, Stanford University (July, 1989), "The Speed of Response of Stock Prices to Block Transactions".

Presenter, <u>Journal of Accounting and Economics</u> Conference on Accounting and the Theory of the Firm, University of Rochester (September, 1988), "Accounting Method Choice: Opportunistic Behavior, Efficient Contracting and Information Perspectives".

Presenter, Seminar on the Analysis of Security Prices, Center for Research in Security Prices, University of Chicago (November, 1985), "The Effects of Bond Rating Changes on Common Stock Prices."

## Invited Research Conferences (continued):

Presenter, Seminar on the Analysis of Security Prices, Center for Research in Security Prices, University of Chicago (November, 1984), "Block Trades of Securities and the Price Pressure Hypothesis".

Selected and Edited Papers, <u>Journal of Accounting Research</u> Conference on Current Econometric Issues in Accounting Research, University of Chicago (May, 1984), (with R. Leftwich and K.Schipper).

Participant, <u>Journal of Accounting and Economics</u> Conference on Management Compensation and the Managerial Labor Market, University of Rochester (April, 1984).

Discussant, AAA Annual Meeting, New Orleans (August, 1983).

Presenter, Seminar on the Analysis of Security Prices, Center for Research in Security Prices, University of Chicago (May, 1983), "Anomalous Abnormal Returns Following Quarterly Earnings Announcements".

Presenter, AAA Annual Meeting, San Diego, CA (August, 1982), "The Economic Consequences of Accounting Choice."

Presenter, Stanford Accounting Summer Conference, Stanford University (July, 1982), "Selectivity in Financial Reporting: The Case of Qualified Audit Opinions."

Presenter, Big Ten Accounting Doctoral Consortium, Ohio State University (May, 1982), "Research on Accounting and the Capital Markets".

Presenter, Seminar on the Analysis of Security Prices, Center for Research in Security Prices, University of Chicago (November, 1981), "The Impact of Qualified Audit Opinions on Stockholders' Returns".

Participant, <u>Journal of Accounting Research</u> Conferences, University of Chicago (May, 1980 to 1989, May, 1993, May, 1994).

Participant, Seminar on the Analysis of Security Prices, Center for Research in Security Prices, University of Chicago (May and November, 1980 to 1989).

## Seminar Presentations:

"The Relevance of the Value-Relevance Literature for Financial Accounting Standard Setting", George Washington University, Journal of Accounting and Economics Conference, University of Rochester.

"Corporate Governance, CEO Compensation and Firm Performance," at University of California-Los Angeles, Columbia University, the University of Colorado-Boulder, George Washington University, Harvard University, Massachusetts Institute of Technology and Stanford University.

"Annual Bonus Schemes and the Manipulation of Earnings," at the University of Chicago, University of Michigan, Penn State University, the University of Pennsylvania and the University of Rochester.

"The Financial Performance of Reverse Leveraged Buyouts," at the University of Oregon and the University of Pennsylvania.

"The Prediction of Stock Returns Using Financial Statement Information," at Baruch College, Georgetown University, Harvard University and the University of Iowa.

## Seminar Presentations (continued):

Case 1:97-cv-00586-SLR

"Financial Performance and Organizational Structure," at the University of Chicago. Drexel University, Emory University, University of Illinois, Massachusetts Institute of Technology, Northwestern University, Princeton University (Department of Economics) and the University of Washington.

"The Effects of Bond Rating Changes on Bond and Stock Prices," at Cornell University, Massachusetts Institute of Technology, the University of Michigan, Ohio State University, the University of Pennsylvania and the University of Rochester.

"Large Block Transactions, The Speed of Response, and Temporary and Permanent Stock Price Effects," at the University of Chicago and the University of Pennsylvania.

"The Effect of Sequential Information Releases on the Variance of Price Changes in an Intertemporal Multi-Asset Market," at the University of Chicago, Massachusetts Institute of Technology, the University of Michigan and Washington University.

"The Effect of Large Block Transactions on Security Prices: A Cross-Sectional Analysis," at the University of Chicago, Duke University, the University of Rochester, Stanford University, the University of Oregon and Vanderbilt University.

"Predicting Audit Qualifications with Financial and Market Variables," at the University of Michigan and Northwestern University.

"Abnormal Stock Returns Associated with Media Disclosures of 'Subject to' Qualified Audit Opinions," at Cornell University.

"Qualified Audit Opinions and Stock Prices: Information Content, Announcement Dates and Concurrent Disclosures," at Yale University.

"Evidence on the Effect of Bond Covenants and Management Compensation Contracts on the Choice of Accounting Techniques: The Case of the Depreciation Switchback," at the University of British Columbia, the University of California at Berkeley, Carnegie-Mellon University, the University of Chicago, Cornell University, the University of Iowa, the State University of New York at Buffalo, Northwestern University, the University of Pennsylvania, Stanford University, the University of Texas, the University of Washington and Yale University.

Page 33 of 46

## **Thesis Committees:**

Tjomme Rusticus, "Executive Severance Agreements," University of Pennsylvania, proposal January, 2006.

Theodore Goodman, "How Do Contracts Adapt to an Increase in Free Cash Flow?", University of Pennsylvania (August, 2005).

Xiaoying, Xie, "Market Structure Change, Efficiency and Value of Firms in the US Property-Liability Insurance Industry", University of Pennsylvania, March 2005.

Jonathan Rogers, "Disclosure Quality and Management Trading Incentives", University of Pennsylvania, March 2005.

Rick Johnston, "Analyst Stock Ownership and Reporting Behavior", University of Pennsylvania (February, 2004)

Lily Fang, "Investment Bank Reputation and the Price and Quality of Underwriting Services", University of Pennsylvania (April 2003)

Dan Bens, "The Determinants of the Amount of Information Disclosed about Corporate Restructurings," University of Pennsylvania as Chairman

Rebecca Tsui, "Successful Tumaround Targets for Pension fund Activism: The Usefulness of Financial Indicators," University of Pennsylvania.

Franco Wong, "The Usefulness of SFAS 119 Disclosures About Derivatives-Related Exposures to Currency Risk for Manufacturing Firms," University of Pennsylvania (December, 1997) as Chairman.

Terry Hildebrand, "An Empirical Investigation of the Implications of Control Theories of Capital Structure," University of Pennsylvania (January, 1997).

Srinivasan Rangan, "Earnings Around Seasoned Equity Offerings: Are They Overstated?," University of Pennsylvania (November, 1995), as Chairman.

John Core, "Directors' and Officers' Insurance Premiums, Litigation Risk and Agency Costs, University of Pennsylvania, (October, 1995).

Ron Adiel, "The Use of Reinsurance to Decrease Regulatory Costs and Enhance Financial Reports Prior to Capital-Issuance," University of Pennsylvania (May, 1994), as Chairman.

James Mahoney, "An Empirical Investigation of the Wealth Effects, Firm Performance and Managerial Decisions of Corporate Takeover Defenses," University of Pennsylvania (May, 1994).

Surya Janakiraman, "Relative Performance Evaluation and Executive Compensation," University of Pennsylvania (December, 1993).

Ed Nelling, "Equity Trading Costs and The Price Effects of 'Shopping the Block'," University of Pennsylvania (June, 1993).

Michael A. Goldstein, "Specialist vs. Dealer Markets: A Comparison of Displayed Bid-Ask Spreads on NASDAQ and the NYSE," University of Pennsylvania (June, 1993).

Andrew Alford, "Some Determinants of Earnings-Price Ratios," University of Chicago (June, 1990).

## Thesis Committees (continued):

William Christie, "An Empirical Investigation of the Return Characteristics of Zero-Dividend Firms," University of Chicago (August, 1989).

Siew Hong Teoh, "Auditor Switches as Signals of Firm Value: Theory and Empirical Evidence," University of Chicago (December, 1988).

Duane J. Seppi, "Block Trading, Asymmetric Information and Information Revelation." University of Chicago (August, 1988).

Michael D. Ryngaert, "The Effect of Poison Pill Securities on Shareholder Wealth," University of Chicago (December, 1988).

Cathy A. Niden, "Role of Taxes in Corporate Acquisitions: Effects of Premium and Type of Consideration," University of Chicago (June, 1988).

Paul H. Schultz, "Tax Loss Realization in Common Stocks," University of Chicago (June, 1988).

Messod Daniel Beneish, "The Impact of Regulatory Changes in the Airline Industry on Shareholders' Wealth," University of Chicago (December, 1987) as Chairman.

John R. M. Hand, "Debt-Equity Swaps," University of Chicago (June, 1987) as Chairman.

Ravi Bhushan, "Collection of Information about Publicly Traded Firms: Theory and Evidence," University of Chicago (March 1987).

Jennifer S. Conrad, "The Price Effect of Short Sales Restrictions: Some Empirical Evidence," University of Chicago (Summer, 1986).

Gautam Kaul, "Stock Returns and Inflation: The Role of the Monetary Sector," University of Chicago (December, 1985).

Robert C. Lipe, "The Information Contained in the Components of Earnings," University of Chicago (December, 1985).

Patricia C. O'Brien, "An Empirical Analysis of Forecasts of Earnings per Share," University of Chicago (December, 1985) as Chairman.

Frederick W. Lindahl, "Quantal Choice Models and Accounting Change," University of Chicago (August, 1985).

Jacqueline S. Pownall, "An Empirical Analysis of the Regulation of the Defense Contracting Industry: The Cost Accounting Standards Board," University of Chicago (August, 1985).

Scott E. Stickel, "Empirical Tests Using Daily Preferred Stock Returns," University of Chicago (August, 1985).

Joseph Duong Van Vu, "An Examination of Corporate Nonconvertible Bond Calls and Their Impact on Security Prices," University of Chicago (June, 1984).

Gregory B. Waymire, "An Empirical Analysis of Voluntary Management Earnings Forecasts," University of Chicago (June, 1984).

Susan Chaplinsky, "The Economic Determinants of Leverage: Theories and Evidence," University of Chicago (March, 1984).

## Thesis Committees (continued):

Donald B. Keim, "The Interrelation Between Dividend Yields, Equity Values and Stock Returns: Implications of Abnormal January Returns," University of Chicago (August, 1983).

Thomas L. Stober, "Nominal Contracting and Accounting Policies: Effects on the Valuation of Rate-regulated Firms," University of Chicago (August, 1983).

## University Service:

Chair, Department of Accounting (2004-present)

Executive Education Strategy Committee (2002-present)

Co-Director, Al West Learning Lab (2001-present)

Co-Chair, WRDS Advisory Committee (2005-present)

Academic Director, Wharton Executive Education Mergers and Acquisitions Program (1998present).

Dean's Strategy Committee (2003)

Dean's Council on Education (2000-2001)

Dean's New Ventures Committee (2000-2001)

Dean's Core Strategy Committee (1999-2000)

Chairman, Wharton Ad Hoc Committee on New Ventures (1999-2001)

Advanced Management Program Faculty Review Committee, Wharton School (1997).

Chairman, Executive Education Policy Committee, Wharton School, (1996-1999) and member (1999-2002).

Dean's Advisory Council, Wharton School, University of Pennsylvania (1995-1999).

Chairman, Committee on Alternative Delivery Modes for the MBA Program, Wharton School, University of Pennsylvania (1994-1995).

Chairman, Health Care Quinquennial Review Committee, Wharton School, University of Pennsylvania (1992-1993).

University Committee on Academic Computing, University of Pennsylvania (1992-1993).

Wharton Committee on Academic Computing, University of Pennsylvania (1991-1996, Chairman, 1993-1994).

Chairman, Personnel Committee, Wharton School, University of Pennsylvania (1990-1991).

Member, Core Strategy Group, Wharton School, University of Pennsylvania (1990-1992)

Member, Accounting Quinquennial Review Committee, Wharton School, University of Pennsylvania (1990-1991, 1996-1997)

Member, Personnel Committee, Wharton School, University of Pennsylvania (1989-1990).

Director, Institute for Professional Accounting Doctoral Prize for Summer Research, University of Chicago (1983-1989).

Member, Disciplinary Procedures Review Committee, Graduate School of Business, University of Chicago (1987-1988).

## Testimony of Robert W. Holthausen during the Last Four Years

- 1. Deposition testimony in the matter of Ronald Cantor, et al Vs. Ronald O. Perelman et al, Index No. 97-586, November 14, 2002.
- 2. Arbitration testimony in the matter of Equimed, Inc. v. Ernst & Young, LLP, Hearing Volume 21, December 17, 2003 and Hearing Volume 22, December 18, 2003.

## **Documents Considered**

- Gregor Andrade and Steven N. Kaplan, "How Costly is Financial (Not Economic)
  Distress? Evidence from Highly Leveraged Transactions that Became Distressed."
  The Journal of Finance, Vol. LIII, No. 5, October, 1998, p. 1443 1493.
- Stephen Hillegeist, Elizabeth Keating, Donald Cram, and Kyle Lundstedt, "Assessing the Probability of Bankruptcy," Review of Accounting Studies, 9, pp. 5-34, 2004.
- Second Amended Complaint, the United States District Court for the District of Delaware, Ronald Cantor, Ivan Snyder and James A. Scarpone, as Trustees of the Mafco Litigation Trust, Plaintiffs, against Ronald O. Perelman, Mafco Holdings Inc., MacAndrews & Forbes Holdings Inc., Andrews Group Incorporated, William C. Bevins and Donald G. Drapkin, Defendants, Civil Action No. 97-586 (RRM), September 13, 2001.
- 4. Offering Memoranda:
  - a. Offering Memorandum, \$517,447,000 Marvel Holdings Inc. Senior Secured Discount Notes due 1998, April 16, 1993, SKA 09027 – 09122.
  - b. Prospectus, \$251,678,000 Marvel (Parent) Holdings Inc. Senior Secured Discount Notes due 1998, October 13, 1993, SKA 05872 05991.
  - c. Offering Memorandum, \$125,000,000 Marvel III Holdings Inc. 9 1/8% Senior Secured Notes due 1998, February 8, 1994, SKA 05077 – 05212.
- 5. Indentures:
  - Indenture, Marvel Holdings Inc. Senior Secured Discount Notes due 1998 and Series B Senior Secured Discount Notes due 1998, April 15, 1993, SKA 04743 – 04850.
  - b. Indenture, Marvel (Parent) Holdings Inc. Senior Secured Discount Notes due 1998, October 1, 1993, SKA 04031 04135.
  - c. Indenture, Marvel III Holdings Inc. 9 1/8% Senior Secured Notes due 1998 and 9 1/8% Series B Senior Secured Notes due 1998, February 15, 1994, SKA 02801 – 02938.
- 6. Marvel Entertainment Group, Inc., Fleer Corp. \$300,000,000 Credit And Guarantee Agreement, September 17, 1992.
- 7. First Amendment and Consent No. 1 to the September 17, 1992 Credit and Guarantee Agreement, April 16, 1993.
- 8. Second Amendment and Consent No. 2 to the September 17, 1992 Credit and Guarantee Agreement, April 30, 1993.
- 9. Third Amendment to the September 17, 1992 Credit and Guarantee Agreement, November 15, 1993.
- Marvel Entertainment Group, Inc., Fleer Corp. Amended and Restated Credit and Guarantee Agreement, August 30, 1994.
- 11. Marvel Comics Italia, S.R.I., Marvel Entertainment Group, Inc. Term Loan and Guarantee Agreement, August 30, 1994.
- 12. First Amendment to the August 30, 1994 Amended and Restated Credit and Guarantee Agreement, November 22, 1994.

- 13. Second Amendment to the August 30, 1994 Amended and Restated Credit and Guarantee Agreement, April 24, 1995.
- 14. Marvel Entertainment Group, Inc., Fleer Corp. \$350,000,000 Credit And Guarantee Agreement, April 24, 1995, M-FS4 1949 2042.
- 15. Consent No. 1 to the August 30, 1994 Amended and Restated Credit and Guarantee Agreement, the April 24, 1995 Credit and Guarantee Agreement, and the August 30, 1994 Term Loan and Guarantee Agreement, February 9, 1996.
- Third Amendment to the August 30, 1994 Amended and Restated Credit and Guarantee Agreement, March 1, 1996.
- 17. Consent No. 2 and First Amendment to the April 24, 1995 Credit and Guarantee Agreement, March 1, 1996.
- 18. Consent No. 3 to the April 24, 1995 Credit and Guarantee Agreement, June 30, 1996.
- 19. Consent No. 2 and Fourth Amendment to the August 30, 1994 Amended and Restated Credit and Guarantee Agreement, June 30, 1996.
- 20. Consent No. 4 and Second Amendment to the April 24, 1995 Credit and Guarantee Agreement, November 25, 1996.
- 21. Waiver No. 1 and Fifth Amendment to the August 30, 1994 Amended and Restated Credit and Guarantee Agreement, November 25, 1996.
- 22. United States Court of Appeals, Third Circuit. Ronald Cantor; Ivan Snyder; James A. Scarpone, as Trustees of the Mafco Litigation Trust, Appellants v. Ronald O. Perelman; Mafco Holdings Inc.; MacAndrews & Forbes Holdings, Inc.; Andrews Group Incorporated; William C. Bevins; Donald G. Drapkin, filed July 12, 2005.
- Court of Chancery of Delaware, New Castle County. Chang's Holdings, S.A., a
  Panamanian corporation, Petitioner, v. Universal Chemicals and Coatings, Inc., a
  Delaware corporation, Respondent, Civ. A. No. 10856., decided on November 22,
  1994.
- 24. Letter from High River Limited Partnership to Andrews Group Incorporated, December 10, 1996, DEF 005442 005443.
- 25. Expert Reports:
  - a. Expert Report of Jeffrey L. Baliban, January 13, 2006.
  - b. Expert Report of Andrew S. Carron, January 13, 2006.
  - c. Expert Report of Bevis Longstreth, January 12, 2006.
  - d. Expert Report of Robert W. Holthausen, March 15, 2002.
  - e. Expert Rebuttal Report of Robert W. Holthausen, March 29, 2002.
  - f. Expert Report of William H. Purcell, March 15, 2002.
  - g. Rebuttal Report of William H. Purcell, March 29, 2002.
  - h. Supplement to the Reports of William H. Purcell, April 9, 2002.
- 26. Depositions:
  - a. Deposition of Robert W. Holthausen, November 14, 2002.
  - b. Deposition of Howard Gittis, March 25, 2002.
- 27. SEC Filings:
  - a. Marvel Entertainment Group, Inc. Form 10-K for the fiscal year ended December 31, 1993.
  - b. Marvel Entertainment Group, Inc. Form 10-K for the fiscal year ended December 31, 1994.

- c. Marvel Entertainment Group, Inc. Form 10-K for the fiscal year ended December 31, 1995.
- d. Marvel III Holdings Inc. Form S-1, March 31, 1994, received by the SEC on March 31, 1994.
- e. Marvel Entertainment Group, Inc. Form S-3, March 14, 1995, received by the SEC on March 14, 1995.
- f. Marvel Entertainment Group, Inc. Proxy Statement (Schedule 14A). April 18, 1994, received by the SEC on April 19, 1994.
- g. Marvel Entertainment Group, Inc. Proxy Statement (Schedule 14A). April 21, 1995, received by the SEC on April 25, 1995.
- h. Marvel Entertainment Group, Inc. Proxy Statement (Schedule 14A), April 18, 1996, received by the SEC on April 19, 1996.
- Tender Offer Statement, Schedule 14D-1, Marvel Entertainment Group, Inc. (Subject Company), and New Marvel Holdings Inc., MacAndrews & Forbes Holdings Inc., Mafco Holdings Inc., (Bidders), DEF 012464 – 012597.

## 28. Press Releases:

- a. "Andrews Grp-Toy Biz -3-: Andrews Might Buy Equity at Marvel," Dow Jones News Service, October 17, 1996, 17:59.
- b. "Marvel 1996 Third Quarter Preliminary Results," PR Newswire, October 8, 1996, 17:05.
- c. "Marvel 3Q96 Results and Performance Update," PR Newswire, November 12, 1996, 09:10.
- d. "Perelman's Andrews Grp Plans To Buy Marvel Stk On The Cheap," Dow Jones News Service, November 12, 1996, 14:42.
- e. "Marvel says lenders OK more borrowing," Houston Chronicle, December 4, 1996.
- f. "Marvel Receives Andrews Proposal," PR Newswire, November 12, 1996, 09:59.
- g. "Perelman drops plan for Marvel; Bondholders set \$365 mil recapitalization plan in agreement with Ronald Perelman," Hollywood Reporter, March 10, 1997.
- h. Comprehensive Factiva search for the period January 1, 1991 December 31, 1997. All sources available in Factiva were used.
- Various Bloomberg articles for the period January 1, 1991 December 31, 1997.

## 29. Analyst Reports:

- a. "Marvel Entertainment Momentum Slows; Downgrade to Hold," Jill S. Krutick, Salomon Brothers, April 8, 1994, DEF 009128 009133.
- b. "MRV: Spiderman and Company Will Recover; Changing Rating to Long-Term Buy," M. Marshall Hopkins, Wheat First Butcher Singer, April 13, 1994, M-MEG5 2093 - 2097.
- c. "Marvel SkyBox Acquisition a Slam Dunk," Paul A. Shaum and David K. Peterson, NationsBank, April 27, 1995, BS 039990 040017.
- d. "Marvel Ent Rating & Estimates Lowered," Lauren Rich Fine and William G. Bird, Merrill Lynch, October 9, 1996, DEF 006931 006932.

- e. "Marvel Entertainment Not so Entertaining; The Squeeze." Lauren Rich Fine and William G. Bird, Merrill Lynch. November 15, 1996, DEF 01371 01372.
- f. "Marvel Entertainment Updated Budget," Lauren Rich Fine, William G. Bird, Merrill Lynch, November 21, 1996, DEF 006867.
- g. "Marvel Entertainment Group Incorporated," Tejas Securities Group, Inc., December 10, 1996, DEF 013141 013149.
- h. "Marvel Entertainment Group Company Report," H. J. DeMott III, The First Boston Corporation, July 21, 1994.
- i. "Marvel Entertainment Company Report," Barron, L. R., S.G. Warburg & Co. Inc., May 25, 1993.
- j. "Marvel Entertainment Company Report," Barron, L. R., S.G. Warburg & Co. Inc., August 24, 1993.

## 30. Data Sources:

- a. CRSP.
- b. IDC.
- c. Bloomberg.
- d. Board of Governors of the Federal Reserve Website (http://www.federalreserve.gov/releases/h15/update).
- e. Thomson Financial First Call Database.
- f. Thomson Financial I/B/E/S Database.
- g. Ibbotson Associates, "Stocks, Bonds, Bills, and Inflation" 2005 and 2006 Yearbooks.

Marvel Entertainment Group, Inc. - Incremental Probability of Financial Distress **Exhibit 4** 

•	Without Marvel # Notes	# Notes		With Marvel III Notes	
•		[0]		(a)	נ
	InputOutput		tuet/O/tuent	Scenario 2 - Maximum Debt Lavai Based on Actual 1993 Operating	Scenario 3 - Maximum Debt Level Based on Forecasted
Face Value of Zero Coupon Equivalent Liabilities (millions of USD)	fract	1907	priord	7 763	HOLD HORD BUILDING
Years to Maturity	· <u>\$</u>	•		rice	2.118
Region Coletain		,	indu.	•	•
finden finds	indu.	48.53%	Orto	50.08%	51,02%
XISK-FIGG Male	Prof.	4.85%	moul	7656 7	7020
Market Value of Equity (millions of USD)	Imput	2,624	hard	1080	F-00:F
Asset Veice (militions of USD)	ţ				7n'7
Annual Columbia.	100	0C8'7	Sept.	3,056	3,120
Caren Vortiony	Output	43.15%	Input	43.15%	43.15%
Probability of Financial Distress		1.80%		7076	,
Incremental Probability of Financial Distress				7.61	2.78%

## Notes and Sources:

Zero coupon aquivalent of the total Habitities on 12/3 1/1993, assuming a maturity of 4 years - see Appendix A, [31 jin]. Zero coupon aquivalent of maximum Habitities - ses Appendix B, [16jib] and [16jid]. The time to maturity of the Marval III Notes. (1**)[e]** [1][b].[1][c]

Standard deviation of daty Marvel stock returns over the year prior to 2/15/94, multiplied by the square frot of 252 (number of trading days in a year).
Asset value and equity volatity are obtained by simultaneously solving the model as described in Section 1 of "Assessing the Probability of Bankruptcy," by Hilogelst, Kealing, Cram and Lundstedt, Review of Accounting Studies, 2004, using the inputs in [1],[2],[4],[5], and setting asset volatify to [7].

The average of the 3-year and the 5-year government bond interest rates as of 2/15/1984. Interest rates are continuously compounded from pounded rate = In(1 + arrural rate).

Equals 97.642.992 (number of outstanding common shares on 12/21/1993 from 1993 10-K, pg. F-3) times \$26.875 (stock pitce on 2/15/1984 from CRSP).

Asset value and asset volatility are obtained by simultaneously solving the model as described in Section 1 of "Assessing the Probability of Bankropicy." by Hillegeist, Keating, Cram and Lundsledt, Review of Accounting Studies , 2004, using the inputs in [1] to [5].

Probabikies of financial distress are obtained using Equation (5) in "Assessing the Probability of Bankrupicy," by Hillageist, Kealing, Cram and Lundsledt, Review of Accounting Studies, 2004. Instead of the satistation, I use the risk-free rate in [4]. (7)(b).(7)(c)

[e][2] =

= [8](p] - (9)(a)

assets y continuely compounded expected return on assets	equity a standard deviation of easet returns	o <sub>e</sub> slandard deviation of equity returns	wing at time T N(.)" normal cumulative distribution function	The first of the profession
$V_k = V_A$ "N(d,) - X * exp(-f * T) * N(d,) V <sub>k</sub> Current markel value of assets	di=  In(VA/X) + (r + dA'/2) * T] / [dA * sqr(T)]	d₁ = d₁ - σ₄ * sqrt(T) Time to maturity of Hability	of "V, "N(d.)" o, IVe	Prob(distress) * N(- $\{h(V_A \mid X) + \{\mu - \sigma_A^{'} \mid Z\} - T\} / \{\sigma_A - sgr(T)\}$

Marvel Entertainment Group, Inc. - Expected Costs of Financial Distress (millions of USD) **Exhibit 5** 

	Scenario 2 - Maximum Debt Level Based on Actual 1993 Operating Cash Flow	Scenario 3 - Maximum Debt Level Based on Forecasted 1994 Operating Cash Flow
Long Term Debt + Market Value of Equity Incremental Probability of Financial Distress	2,874.4	2,874.4
Panel A: Incremental Expected Cost of Financial Distress		
Average Cost of Financial Distress (in %) Cost of Financial Distress	15.0%	15.0%
Panel B. Incremental Expected Cost of Financial Distress, "No Shock" Sample		
Average Cost of Financial Distress (in %) Cost of Financial Distress	%0.0 %0.0	%0.0 %0.0

ΞΞ

# Notes and Sources:

- = 250.2 (long term debt including the current portion as of 12/31/93, 1993 10-K, pg. F-3) + 2624.2 (market value of equity as of 2/15/94 based on the number of oulstanding common shares on 12/31/93 and stock price on 2/15/94 from CRSP) Ξ
- From Exhibit 4, [9][b] and [9][c].
- Average of 10% and 20% estimates of costs of financial distress from Gregor Andrade and Steven N. Kaplan, "How Costly is Financial (Not Economic) Distress? Evidence from Highly Leveraged Transactions that Became Distressed," Jo*umal of Financ*e , Vol. LIII, No. 5 (October, 1998), pg. 1463. 2 5
  - <u> 4</u>
- The average of 5.5% (industry-adjusted growth in EBITDA/Sales from onset to postresolution of financial distress) and 31.2% (industry-adjusted growth in NCF/Sales Highly Leveraged Transactions that Became Distressed," Journal of Finance, Vol. LIII, No. 5 (October, 1998), pg. 1474, Table IX, Panel B, indicates zero costs of from onset to postresolution of financial distress) from Gregor Andrade and Steven N. Kaplan, "How Costly is Financial (Not Economic) Distress? Evidence from inancial distress. NCF is defined as EBITDA less capital expenditures.
- Cost of financial distress is zero since the average cost of financial distress (in %) is zero in [5]. 9

**Exhibit 6** 

# Prudent Investor Rate: Average Portfolio Rate of Return

Precedent set from Chang's Holdings, S.A. v. Universal Chemicals and Coatings Inc., Decided: Nov. 22, 1994.

10% 15% 15% 20%	1 Year Certificate of Deposit 80 Day Treasury Bill 80 Day Commercial Paper 10 Year Treasury Branch	4/15/1993-12/31/2005 [C] 4.42% 3.84% 4.19%	10/1/1993-12/31/2005 [d] 4.45% 3.87% 4.23%	Average Annual Rate Of Return for Period //31/2005 2/15/1984-12/31/2005 11/12/19/   e  4.5% 4.47% 3.89% 4.25% 4.23% 4.23%	96-12/31 II	9/13/2001-12/31/2005 [9] 2.31% 1.88% 2.04%
20% 20% 100%	Moody's day Corporate Bond Average Risk Mutual Fund Prudent Investor Rate	7.15% 8.53% 12.02% 7.19%	6.89% 8.34% 12.10% 7.12%	6.84% 8.33% 12.21% 7,16%	7.03% 8.31% 9.62% 6.53%	6.14% 9.17% 3.66% 4.61%

Notes and Sources:

Percentage of Funds for the Portfolio were taken from Chang's Holdings, S.A. v. Universal Chemicals and Coatings Inc., Decided November 22, 1994, Page 5. 

1 Year Certificate of Deposil is combined from a combination of Federal Reserve Board 6 month CD yiekts and a Bloomberg 12 Month CD. The Bloomberg 12 Month CD came Into existence on 11/25/1996, and therefore prior to this date, the Federal Reserve Board 6 month CD yields were used as a proxy for the Bloomberg 12 Month CD. In order to convert the 6 month CD from the FRB into a 12 Month CD comparable to Bloomberg's, an average yield spread was computed between the two instruments post 17/25/1996. The spread was then applied to the FRB 6 month CD and used in a connective series with the 12 Month Bloomberg CD. [4][b]

Average Annual Rate of Relum was computed by investing in a 12 Month CD on the first day of each year and re-investing in the same instrument after maturity. The annual rates of return were computed and then an anithmetic mean was calculated from the beginning of the each period to the end of 2005. [1][0-9]

90 Day Treasury Bill Yields were taken from the FRB H15 website, http://www.federafreserve.gov/releases/h15/update/. [5][c-0]

Average Annual Rate of Return was computed by investing in a 3 Month Treasury Bifl on the first quarter start date prior to each period and re-invested in the same instrument after maturity The quarterly rates of return were computed and then an arithmetic mean was calculated from the beginning of the period to the end of 2005.

90 Day Commercial Paper Yields were taken from the FRB H15 website, http://www.federalreserve.gov/releases/h15/update/. The Discontinued Commercial Paper was used prior to 1/1/1997 and the Non-Financial Commercial Paper was used post 1/1/1997. [3][p]

Paper on the first quarter start date prior to each period and re-invested in the same instrument after maturity. The quarterly rates of return were computed and then an arithmetic mean was Yields were first converted from the Discount Basis yields provided by the FRB into a yield to maturity. Average Annual Rate of Return was computed by investing in a 3 Month Commercial calculated from the beginning of the period to the end of 2005. [3](c-g]

10 Year Treasury Bonds were taken from Ibbotson Associates 2005, 2006 Yearbook. The 10 Year Treasury Bond was derived from investing two-thirds in an Intermediate Term Government Bond (defined by Ibbotson Associates as a bond with maturity of approximately 5 years and no less than 5 years) and one-third in a Long Term Government Bond (defined by Ibboston Associates as a bond with maturity of approximately 20 years). **4** 

Average Annual Rate of Return was computed by taking the arithmetic mean of the Total Returns provided by Ibbotson Associates for each individual period.

Moody's Aaa Corporate Bonds were taken from Ibbotson Associates 2005, 2006 Yearbook. The Long-Term Corporate Bond Series from Ibbotson was used as a proxy for the Moody's Aaa Corporate Bond. The Long-Term Corporate Bond Series is represented by the Salomon Brothers Long-Term High-Grade Corporate Bond Index [2][0]

Average Annual Rate of Return was computed by taking the arithmetic mean of the Total Returns provided by Ibbotson Associates for each Individual period (2)(c-a)

Average Risk Mutual Fund was approximated by the S&P 500 Total Refurn Index. (e)(e)

Average Annual Rate of Relum was computed by taking the annual rates of return from the beginning of the period to the end of 2005 and taking the arithmetic mean for each individual period.

Prudent Investor Rate for each individual period were calculated as a weighed average of the average annual returns by the Percentage of Funds for the Portfolio in [a].

132

Appendix A Marvel Entertainment Group, Inc. - Zero Coupon Fauivalent of the

[b] Date [c] Maturity Date		¥00 4						
		12/3 1/93						
		12/31/97						
1) Long Term Debt (Millions of USD) 1 Total Liabilities (Millons of USD)	Û c	250.2						
Principal and interest	Tem Loan/Credit Facility -							
Payment Dates	Principal Repayments		Term Loan/Credit Facility - Interest Payments	Facility - Intere	at Payments	Short Term Liab	Short Term Liabilities and All Other Long Term ! Jahilities	on Term ! Jahilithes
E	3	Ξ	8	8	Ξ	E	Ē	<u></u>
	Principal	Equivalent Value	Principal	Interest E	Interest Equivalent Value	Principal	•	
	Repayment	on 12/31/1997	Outstanding	Payment	on 12/31/1887	Repayment	Interest Payment	equivarent value on 12/31/1997
(3) 03/31/84	;	;	250.2	3.75	4,69		0.15	0.19
	22.5	28,00						i
[5] USCUM4			1.722	3.42	4.21		0.15	0.19
			7.722	3,42	4,15		9 0	=======================================
	22.5	27.19						•
			205.2	3.08	3.68	64.4	20.03	74.88
			205.2	3,08	3,63		. C	
	22.5	28.40						•
			182.7	2.74	3,18		\$ 0	•
_			182.7	2.74	3.13		2 4	<i>•</i>
[11] 10/19/95	22.5	25.63		i	!		2	71.0
			160.2	2.40	2.71		4	
			160.2	2.40	2.87		2 4	7.0
[14] 04/19/96	22.5	24.88		ì			C1.0	0.17
			1.761	2.07	2.28		4	•
5) 09/30/96			137.7	2.07			0.0	71.0
[17] 10/19/96	22.5	24.15			ì		6.13	8F.0
			115.2	1.73	1.83			•
			115.2	1.73	181		2 5	P. 0
[20] 04/19/97	22.5	23.46		•			5.0	BL.O
18/05/90			92.7	1.39	1.43		9, 6	
_			92.7	1.39	3.5		6.0	0.10 11.0
16/21/01	22.5	77.72		}	•		CL.O	81.0
[24] 12/31/97			70.2	1.05	1.05		4	•
_			70.2	1.05	70.		2 5	
[26] 04/19/98	22.5	22.11		•	<u>.</u>		G.13	81.0
_			47.7	0.72	69.0		9 6	•
_			1.13	0.72	200		0.13 0.43	97.0
10/19/98	47.7	45.50		!	}	•	G. 13	0.14
ES								

# Appendix A

# Marvel Entertainment Group, Inc. - Zero Coupon Equivalent of the Total Liabilities on 12/31/1993, Assuming a Maturity of 4 Years

ᆲ	
ources	
Pud	
Notes	

Marvel's 1993 IO-K (pg. F-12) states that the cost of borrowings based on the Eurodolar Rale, including the margin, was 4.67% and the cost of borrowings based on the Allemale Base Rale, including the margin, was 6.0% for 1993. The twoner rate is used in the calculation
-12) states t 3. The highe
PK (pg. F 1% for 199
/eľs 1993 1 jin. was 6,0
Ξ

The date as of which debt and other liability data are taken from Marvel's 1993 10-K.

The maturity of the hypothetical zero coupon equivalent liabilities is sal to be 4 years to match the maturity of the Marvel III notes.

Marvel's 1993 10-K, pg. F-3.

Includes current portion of long term debt - from Marvel's 1993 10-K, pg. F-3.

Principal repayment and interest payment dates as specified in Marvel's 1993 10-K, pg. F-12 and in the Credit and Guarantee Agreement between Marvel and Chemical Bank, dated 9/17/1992, pg. 15-16. Principal repayments of the Term Loan/Credit facility as specified in the 1993 10-K, pg. F-12 and in the Credit and Guarantee Agreement between Marvel and Chemical Bank, dated 9/17/1992, pg. 28. 2020coEcs2cEc

Principal repayments of the Term Lean/Gradit Facility on various dates are converted to the equivalent value on 12/31/1997 using semi-annual compounding.

Principal outstanding on the Term Loan/Credit Facility equals (d) minus all principal repayments in [g] prior to the given date in [f].

7/回. 冒

nterest payments on the Term Loan/Credit Facility are converted to the equivalent value on 12/31/1997 using quarterly compounding.

Principal repayments of short term liabilities and all other long term liabilities.

Principal repayment of the short ferm liabilities the forg term flabilities are converted to the equivalent value on 12/31/1997 using the annual interest rate. Interest payments on all other tong term flabilities are converted to the equivalent value on 12/31/1997 using quarterly compounding. It is assumed that all other long term liabilities have the same interest rate and interest payment schedule as the Term Loan/Credit Facility.

= \$19.9 million in "Accounts payable" + \$44.5 million in "Accused expenses and other" - from Marvel's 1993 10.K, pg. F-3.

As of 12/31/1993. Marvet's long term debt (including current portion) was \$250.2 million while the amounts to be paid in the aforementioned schedule in [g] sum to \$225 million. The difference of \$25.2 million is assumed to be from the revolving Credit Facility between Marvel and Chemical Bank dated 9/17/1992, which malures on 10/19/1996, assumed to be the last principal repayment date of the Term Loan, \$47.7 = \$22.5 + \$25.2.

All other king term liabilities are assumed to be paid off at the last principal repayment date of the Term Loan/Credit Facility. They consist of \$10 million in "Other Long Term Llabilities" and \$0.1 million "Due to feer from Marvel's 1993 10-K, pg. F-3.

Equals the sum of [1] to [29].

= [30]kh] + [30]kk] + [30]kh] = [31][n] / [e]

Marvel Entertainment Group, Inc. - Calculation of Zero Coupon Equivalent Liabilities (millions of USD) Appendix B

	Net Income	
	+ Extraordinary Losson	56.0
	+ Depreciation and American	0.0
		12.3
	Consultation interest Expense	14.6
<u>.</u>	+ laxes Accrued	
	+ Minority Interest	38.4
	- Extraordinary Caine	0.0
		0.0
	Chaisainuigh Nei incoma from Subsidiares	4.5
	Annualized Consolidated Operation Cash Flow	

offities.
릥

		[a]	ē	3
		,	Scenario 2 - Maximum Debt Level Based on Actual 1993	Scenario 2 - Maximum Debt Scenario 3 - Maximum Debt Level Level Based on Actual 1993 Based on Forecasted 1994
5	Appliablized Consolidated Occasion	Base	Operating Cash Flow	
· =	Moviment a secretary of the second of the se		116.8	138.1
- =	Maximum Albushle Daki		3.0	3.0
• ==	Non-Date Liabilities es of 2002-002		350.4	414.2
<u> </u>	Maximum Total Liabilities		74.5	74.5
-	Ratio of Zero Couron Equivalent firabilities to Total Littles		424.9	488.7
-	Zero Coupon Eduvalent Labilities	,	1.25	1.25
		406.1	531.4	6112

# Notes and Sources:

Operating Cash Flow for 1993 is calculated as defined in Section 1.1 of the Credit and Guarantee Agreement between Marvel and Chemical Bank, dated 9/17/1992, pg. 8-9. Net Income and adjustments necessary to obtain Operating Cash Flow are from Marvel's 1993 10-K, pg. F-4 and F-6.

= [9] \* 1.182. 1.182 is the ratio of 1994 to 1993 Operating Profit from Salomon Brothers' report on Marvel on April 8, 1994, Figure 3.

As defined in the Credit and Guarantee Agreement between Marvel and Chemical Bank, daled 9/17/1992, pg. 69. [10][c] [11] [12] [13] [14] [15]

Sum of accrued expenses and other, accounts payable, and all other long term liabilities from Marvel's 1993 10-K, pg. F-3. = [10] \* [11]

= [12] + [13] Ratio of zero coupon equivalent liabilities to total liabilities as of 12/31/1993 - see Appendix A. [32][n].

16][a] Zero coupon equivalent of the total liabilities on 12/31/1893, assuming a maturity of 4 years - see Appendix A, [31][n].
[18][b],[18][c] = [14] • [15]